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George Pappas
Suite 300
919 S. Harrison Street
Fort Wayne, IN 46802

EXAMINER

DURHAM, NATHAN E

ART UNIT	PAPER NUMBER
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3765

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,023

Applicant(s)

SPEICH, FRANCISCO

Examiner

Nathan E. Durham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-12 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-10,12,15-21 and 23 is/are rejected.
- 7) ☒ Claim(s) 11 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Amendment***

Applicant's amendment and corresponding arguments, filed 20 February 2007, have been reviewed and considered. Claims 1, 3-6 and 8-11 have been amended, claims 2, 7, 13 and 14 have been canceled and claims 15-23 have been added. Therefore, claims 1, 3-6, 8-12 and 15-23 are currently pending. An updated search and further evaluation of the prior art of record has prompted the presentation of the following rejections. Any arguments are moot in view of new ground(s) of rejection. Additionally, previous claims 2, 5 and 8 have been reviewed and determined to be rejected under prior art. This Office Action is considered a second non-final rejection.

Claim Objections

Claims 8 and 15 are objected to because of the following informalities: In both claims 8 and 15, the applicant recites the phrase "CAM computer". It is unclear to the examiner what is meant by the abbreviation "CAM". "CAM" is known to represent "Channel Access Method", "Computer-Aided Manufacturing", "Content-Addressable Memory", "Computer-Assigned Mapping", "Computer-Aided Machining" and other phrases. For the purpose of this Office Action, "CAM" will be assumed to mean "Computer-Aided Manufacturing". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 8-10, 12, 15-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over MALLARD (U.S. Patent 4,835,699) in view of MESCHIA (European Patent 1,128,244 A2).

Regarding claim 1, MALLARD teaches a system for monitoring, analyzing, and controlling a number of weaving machines (Col. 1, Lines 6-18). MALLARD teaches a control computer (72a - 72n) for each weaving machine (70a - 70n) (Col. 7, Lines 47-55) and a central computer (58). However, MALLARD does not disclose the control computers being networked through wireless signal transmission means to a first transmission unit, which is connected to a second transmission unit by means of a data line and wherein the second transmission unit is connected via wireless signal transmission means to the central computer. The control computers of MALLARD are connected via a data line (66) to a computer (52) and then are connected to the central computer (58) through an additional data line (Figures 1- 2(b)). The system of MALLARD was developed in 1987 when the technology was not as advanced as it was when the applicant's invention was created.

MESCHIA teaches a system for networking and controlling a number of machine tools (Col. 1, Lines 3-5) (Col 2, Lines 42-52). The system of MESCHIA contains a control computer for each machine (11) (Col. 5, Lines 22-27) and a central computer (4) (Col. 6, Line 9). MESCHIA teaches the control computers being connected via wireless signal transmission means to a transmission unit (20) (Col. 5, Lines 36-49), which is connected to the central computer by means of a data line (5)(Fig. 3) to allow for communication in both directions wherein the machines can be separate from the central computer and have less clutter from data lines. MESCHIA further teaches the central computer being able to be connected to other devices through other local networks (LAN) or networks (WAN) (Paragraphs 0040-0044).

In regards to claim 3, MESCHIA discloses the wireless signal transmission means form a radio network for signal transmission (Col. 5, Lines 25-27 and Lines 36-40). The WLAN standard (as mentioned in line 3 of claim 3) is not one particular standard, therefore the signal transmission could be any standard. MESCHIA discloses using any standard or more specifically IEEE 802.11 (Wi-Fi) (Col. 3, Lines 26-38).

In regards to claim 4, MESCHIA discloses the wireless transmission means having a send and receive unit being integrated into the respective terminal device (Col. 5, Lines 40-44).

Accordingly, it would have been obvious to one with ordinary skill in the art at the time the invention was made to have incorporated wireless signal transmission means with two or more wireless transmission units connected by a

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data line (through the computer 52) in place of the data lines (64, 66) of MALLARD in order to create a modern control system that allows the central computer and weavings machines to be separated by a greater distance from one another and to reduce the amount of data line clutter.

In regards to claim 5, MALLARD and MESCHIA teach a system as discussed above. However, MESCHIA fails to disclose a unit for expanding the radio cell being assigned to at least the radio network for the control computers and the first transmission unit. It is known in the art that units for expanding radio cells are used to allow a greater distance between the two components that a wireless radio network separates. Accordingly, it would have been obvious to one with ordinary skill in the art at the time the invention was made to have included a radio cell expanding unit to at least one of the radio networks of MALLARD in view of MESCHIA in order to allow the control computers to be separated from the central computer by a greater distance away while still allowing the transmission of data.

In regards to claim 6, MALLARD and MESCHIA teach a system as discussed above. However, MESCHIA fails to discuss the data line being a telephone line. MESCHIA discloses a cable line for the particular connection. Applicant has not disclosed that having a telephone line further solves any stated problem or is for any particular purpose besides personal preference. Moreover, it appears that the system would perform equally well with the configuration as set forth by MESCHIA to allow for the transfer of data to and from the central computer and transmission unit. Accordingly, it would have been obvious to one

having ordinary skill in the art at the time the invention was made to have provided the system of MESCHIA with the telephone line as set forth by the applicant's claim 6 because it appears to be an arbitrary design configuration which fails to patentably distinguish over MESCHIS.

In regards to claim 8, MALLARD discloses the central computer being a CAM computer. The term, "CAM" is considered to mean "computer-aided manufacturing" and is defined as the use of a specially designed computer(s) to control and monitor industrial machinery (Dictionary.com). The central computer of MALLARD is controlling and monitoring the weaving machines and is therefore considered a "CAM computer". The central computer provides data possessing functions (first paragraph of Col. 7) and contains the structure as defined by the applicant, therefore the central computer of MALLARD is considered to be capable of providing the function of "determining the production data from the operating data and for storing pattern data".

In regards to claim 9, MALLARD discloses a printer being assigned to the central computer (Fig. 1).

MALLARD discloses a system as discussed above. However, MALLARD fails to disclose a scanner being assigned to the central computer.

In regards to claim 10, MESCHIA teaches a scanner (17) being assigned to a central computer (Col. 6, Lines 37-39) in order to digitize an image into pattern data and be stored in the central computer and also to share this image over the network.

Accordingly, it would have been obvious to one with ordinary skill in the art at the time the invention was made to have provided the system of MALLARD with a scanner being connected to the central computer, in light of the teachings of MESCHIA, in order to provide a way to create and store pattern data and share this data over the network.

In regards to claim 12, MALLARD discloses the central computer or the control computer being capable of converting digitized data into machine data processable by the corresponding machines. If the controllers were unable to convert digitized data into machine data, there would be no purpose to the entire setup because the machines would be unable to be controlled through one centralized computer.

Regarding claim 15, MALLARD teaches a system for monitoring, analyzing, and controlling a number of weaving machines (Col. 1, Lines 6-18). MALLARD teaches a control computer (72a - 72n) for each weaving machine (70a - 70n) (Col. 7, Lines 47-55) and a central computer (58). However, MALLARD does not disclose the control computers being networked through wireless signal transmission means to a transmission unit, which is connected to the central computer through a data line. The control computers of MALLARD are connected via a data line (66) to the central computer (Figures 1 -2b). The system of MALLARD was developed in 1987 when the technology was not as advanced as it was when the applicant's invention was created. MALLARD discloses the central computer being a CAM computer. The term, "CAM" is considered to mean "computer-aided manufacturing" and is defined as the use of

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a specially designed computer(s) to control and monitor industrial machinery (Dictionary.com). The central computer of MALLARD is controlling and monitoring the weaving machines and is therefore considered a "CAM computer". The central computer provides data possessing functions (first paragraph of Col. 7) and contains the structure as defined by the applicant, therefore the central computer of MALLARD is considered to be capable of providing the function of "determining the production data from the operating data and for storing pattern data".

MESCHIA teaches a system for networking and controlling a number of machine tools (Col. 1, Lines 3-5) (Col 2, Lines 42-52). The system of MESCHIA contains a control computer for each machine (11) (Col. 5, Lines 22-27) and a central computer (4) (Col. 6, Line 9). MESCHIA teaches the control computers being connected via wireless signal transmission means to a transmission unit (20) (Col. 5, Lines 36-49), which is connected to the central computer by means of a data line (5)(Fig. 3) to allow for communication in both directions.

In regards to claim 16, MESCHIA discloses the wireless signal transmission means form a radio network for signal transmission (Col. 5, Lines 25-27 and Lines 36-40). The WLAN standard (as mentioned in line 3 of claim 3) is not one particular standard, therefore the signal transmission could be any standard. MESCHIA discloses using any standard or more specifically IEEE 802.11 (Wi-Fi) (Col. 3, Lines 26-38).

In regards to claim 17, MESCHIA discloses the wireless transmission means having a send and receive unit being integrated into the respective terminal device (Col. 5, Lines 40-44).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to have provided the system of MALLARD with wireless networking capabilities, including one or more transmission units, in light of the teachings of MESCHIA, in order to create a modern control system for weaving machines that encompassed all of the technology available.

In regards to claim 18, MALLARD and MESCHIA teach a system as discussed above. However, MESCHIA fails to disclose a unit for expanding the radio cell being assigned to at least the radio network for the control computers and the transmission unit. It is known in the art that units for expanding radio cells are used to allow a greater distance between the two components that a wireless radio network separates. Accordingly, it would have been obvious to one with ordinary skill in the art at the time the invention was made to have included a radio cell expanding unit to at least one of the radio networks of MALLARD in view of MESCHIA in order to allow the control computers to be separated from the central computer by a greater distance away while still allowing the transmission of data.

In regards to claim 19, MALLARD and MESCHIA teach a system as discussed above. However, MESCHIA fails to discuss the data line connecting the central computer to a transmission unit as being a telephone line. MESCHIA discloses a cable line for the particular connection. Applicant has not disclosed

that having a telephone line further solves any stated problem or is for any particular purpose besides personal preference. Moreover, it appears that the system would perform equally well with the configuration as set forth by MESCHIA to allow for the transfer of data to and from the central computer and transmission unit. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the system of MESCHIA with the telephone line as set forth by the applicant's claim 6 because it appears to be an arbitrary design configuration which fails to patentably distinguish over MESCHIS.

In regards to claim 20, MALLARD discloses a printer (55) being assigned to the central computer (Fig. 1).

MALLARD discloses a system as discussed above. However, MALLARD fails to disclose a scanner being assigned to the central computer.

In regards to claim 21, MESCHIA teaches a scanner (17) being assigned to a central computer (Col. 6, Lines 37-39) in order to digitize an image into pattern data and be stored in the central computer and also to share this image over the network.

Accordingly, it would have been obvious to one with ordinary skill in the art at the time the invention was made to have provided the system of MALLARD with a scanner being connected to the central computer, in light of the teachings of MESCHIA, in order to provide a way to create and store pattern data and share this data over the network.

In regards to claim 23, MALLARD discloses the control computer or central computer being capable of converting digitized data into machine data processable by the corresponding machines. If the controllers were unable to convert digitized data into machine data, there would be no purpose to the entire setup because the machines would be unable to be controlled through one centralized computer.

Allowable Subject Matter

Claims 11 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record, as cited on attached PTO-892, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan E. Durham whose telephone number is (571) 272-8642. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary L. Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NED



GARY L. WELCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700